



QUALITY OF LIFE: A REVIEW OF THE COMPONENTS FOR CHRONIC KIDNEY DISEASE.

Zakirah Ahmad Naw¹, Yuzana Mohd Yusop², Harmy Mohamed Yusoff³

1. Department of Community Health, Faculty of Medicine, Universiti Sultan Zainal Abidin, Malaysia

2. Department of Family Medicine, Faculty of Medicine, Universiti Sultan Zainal Abidin, Malaysia

Corresponding Author: Zakirah Ahmad Naw¹, Department of Community Health, Faculty of Medicine, Universiti Sultan Zainal Abidin, Malaysia

Email: zakirah.zikr94@gmail.com

Received 13 September 2023; **Accepted** 28 September 2023; **Online Published** 20 Oktober 2023

Abstract

One of the best ways to evaluate a person's health quality is by measuring their Quality of Life (QoL). In assessing health, the QoL concept has exploded in popularity during the previous four decades. It has been used as the sole outcome in studies aimed at helping unhealthy patients improve their physical or emotional well-being. As a result, a specific evaluation method for health-related QoL is needed for this rapidly rising global population. This review aims to discuss components of QoL.

Keywords: Quality of Life, Chronic Kidney Disease.

INTRODUCTION

Chronic Kidney Disease (CKD) is a prevalent health condition characterized by a progressive decline in kidney function. Individuals living with CKD often face various challenges that impact their Quality of Life (QoL). Understanding the multidimensional aspects of QoL in CKD is crucial for providing comprehensive care and support to these individuals. In this introduction, we will review the findings of several studies that have examined different dimensions of QoL in CKD, including physical well-being, social relationships, emotional well-being, and material well-being. Numerous studies have emphasized the importance of understanding the multidimensional aspects of QoL in CKD to

provide comprehensive care and support to these individuals. QoL is a complex construct, encompassing various domains such as physical well-being, social relationships, emotional well-being, and material well-being (Whitty C.J.M., et al. 2020). Addressing these domains is essential for improving the overall well-being and management of CKD patients.

Research has shown that CKD significantly affects the physical well-being of individuals, often leading to fatigue, pain, and limitations in daily activities. Furthermore, social relationships can also be adversely impacted, as the chronic nature of the disease may result in increased social isolation and reduced participation in social activities. The emotional well-being of CKD patients is another critical

dimension to consider. Anxiety, depression, and the constant burden of managing the disease can lead to heightened emotional distress among patients. Additionally, the economic implications of CKD can disrupt material well-being, leading to financial strain due to medical expenses and potential work limitations (Walklin, C.G. et al. 2023)

To better understand and address these challenges, various studies have been conducted to assess QoL in CKD patients. The development of the health-related QoL field in medicine was spurred on, not only by an evolving recognition of the subjective factor,

but also by the increasing prevalence of chronic health conditions requiring long-term treatment and life-long care(Bullinger, M., & Quitmann, J. 2014). Therefore, this paper will review the existing general QoL for CKD from several literature. From Table 1 below, a total of 10 general health-related QoL for CKD literature were reviewed (Felce & Perry, 1995; Tarca et al., 2021; Cruz et al., 2016; Musa et al., 2018; Kim & Park, 2019; Kirsten L. et al., 2015; Silva SM et al., 2016; Green et al., 2011; Wright et al. 2011; Kalandar et al., 2007).

Table 1: General components of health-related QoL for CKD

No.	Author	Details
1.	Felce & Perry, 1995	Physical well-being <ul style="list-style-type: none"> • Health • Personal safety • Nutrition Social well-being <ul style="list-style-type: none"> • Interpersonal relationship • Community Emotional well-being <ul style="list-style-type: none"> • Mental health • Happiness Material well-being <ul style="list-style-type: none"> • Transport • Wealth • Housing quality
2.	Kalandar et al., 2007	Emotional well-being <ul style="list-style-type: none"> • Depressed patients have a low quality of life compared to patients who are not experiencing health problems.
3.	Green et al., 2011	Social relationships <ul style="list-style-type: none"> • Patients with chronic renal disease should be informed of healthcare since it can help them communicate with their guardians and establish positive relationships.
4.	Wright et al., 2011	Material well-being <ul style="list-style-type: none"> • Patients do not have enough money to run dialysis sessions.

		<ul style="list-style-type: none"> • Family support can help patients settle their treatment bills.
5.	Kirsten L. et al., 2015	Physical health <ul style="list-style-type: none"> • Sudden weight loss. • Look less energetic.
6.	Silva SM et al., 2016	Social relationships <ul style="list-style-type: none"> • Social support from healthcare when undergoing dialysis can help patients when receiving treatment.
7.	Cruz et al., 2016	Emotional well-being <ul style="list-style-type: none"> • Feel terrified, furious and depression • Mental health: suffer from psychiatric problems
8.	Musa et al., 2018	Emotional well-being <ul style="list-style-type: none"> • Acute anxiety • Mild to moderate stress
9.	Kim & Park, 2019	Emotional well-being <ul style="list-style-type: none"> • Need support • Self-motivation
10.	Tarca et al., 2021	Emotional well-being <ul style="list-style-type: none"> • When someone begins dialysis, they may experience a wide range of emotions, and their moods are likely to change.

DISCUSSION

The term "quality of life" known as QoL was introduced by D.R. Elkinton in 1966 in the *Annals of Internal Medicine* as he addressed the challenges of organ transplantation (Elkinton, 1966). In recent times, the concern surrounding the QoL for patients dealing with chronic renal failure, particularly those awaiting kidney transplantation, has grown significantly. CKD and various forms of renal replacement therapy create a persistent state of stress. This somatic condition imposes limitations across all aspects of patients' lives. Individuals undergoing program hemodialysis (HD) experience a noticeable decline in their quality of life compared to healthy counterparts, primarily attributed to feelings of listlessness and uncertainty regarding the future (2018 Annual Data Report, 2019).

This review aims to understand and know the general components of QoL for chronic kidney patients. The reviewed studies shed light on the multidimensional nature of QoL in individuals with CKD. The studies collectively highlight the physical, social, emotional, and material aspects that contribute to the overall well-being of individuals living with CKD. Physical well-being emerged as a significant component of QoL in CKD. Most researchers characterise the components of health and QoL for CKD patients differently.

As we can see, Felce and Perry (1995) looked at a comprehensive description of health QoL in CKD patients two decades ago. Both are concerned with the patients' physical, social, emotional, and material well-being. When it comes to the millennium era, the meaning and conception of well-being have shifted slightly. Many researchers believe that emotional and

social relationships are the most important factors in defining QoL for CKD patients.

Specifically, Felce and Perry (1995) emphasized the importance of physical well-being, including health, personal safety, nutrition, and material factors. Likewise, a study by Kalander et al. (2007) highlighted the impact of emotional well-being on QoL, emphasizing the influence of depression. Green et al. (2011) emphasized the role of social well-being, relating it to interpersonal relationships and social support as well as material well-being, including financial challenges related to accessing treatment, appearing as a key factor influencing QoL (Wright et al., 2011). Social and material well-being are mutually responsible to ensure social and financial support.

Furthermore, CKD patients often experience physical manifestations such as sudden weight loss and decreased energy levels (Kirsten L. et al., 2015), they need a comprehensive healthcare approach that addresses these factors to improve QoL. The positive effects of social support from healthcare providers and family members have been highlighted by Silva et al. (2016). Emotional well-being has been identified as an important factor affecting QoL, with a study by Cruz et al. (2016), Musa et al. (2018), Kim and Park (2019), and Tarca et al. (2021) stated the various emotions experienced by CKD patients and their need for psychological support should be noted.

The reviewed studies collectively emphasize the multidimensional nature of QoL in CKD

patients, encompassing physical, social, emotional, and material well-being. Healthcare approaches addressing these dimensions are vital for enhancing the overall QoL of individuals affected by CKD. By delving into these QoL dimensions, valuable insights are gained, informing interventions and strategies that can effectively improve the well-being of individuals living with this condition. Such targeted efforts hold the potential to make a tangible positive impact on the QoL outcomes for CKD patients.

CONCLUSION

In conclusion, CKD exerts a profound influence on the QoL of affected individuals, comparable in its impact to chronic pain due to the disruptive effects on mood, sleep patterns, and overall adjustment to the disease (Elhag, S. et al., 2022). Moreover, the presence of chronic pruritus has been linked to increased morbidity, higher rates of cardiovascular and infection-related hospitalizations, and prolonged recovery from dialysis (Sukul, N. et al., 2021). Sleep disturbances, including restless sleep and nocturnal awakenings, further contribute to the exacerbation of depression symptoms among CKD patients (Sukul, N. et al., 2021).

This study's brief review underscores the nature of QoL in CKD, encompassing physical, social, emotional, and material well-being. Addressing these dimensions holistically is crucial for improving the QoL of individuals living with CKD. The physical well-being of CKD patients, encompassing factors such as health status, nutrition, and energy levels, is intricately

intertwined with their overall QoL (Felce & Perry, 1995; Kirsten L. et al., 2015). Social support networks, including relationships with healthcare providers and family members, play a pivotal role in enhancing the social well-being of CKD patients (Silva et al., 2016; Green et al., 2011). Emotional well-being, characterized by a spectrum of emotions and mental health challenges, requires targeted interventions and psychological support to alleviate its impact (Tarca et al., 2021; Cruz et al., 2016; Musa et al., 2018; Kalandar et al., 2007). Moreover, the financial strain associated with CKD treatment, such as the costs of dialysis sessions, has a tangible impact on the material well-being and overall QoL of affected individuals (Wright et al., 2011).

To enhance the QoL of CKD patients, a multidimensional approach is paramount. Collaborative efforts among healthcare professionals, policymakers, and support systems are essential to provide comprehensive care addressing the diverse aspects of QoL. Personalized treatment plans tailored to the specific needs of CKD patients, coupled with accessible psychological support services and financial assistance programs, are key components of such an approach. Additionally, fostering an environment that promotes positive relationships, community involvement, and education can further contribute to an improved QoL.

Source of funding: This project was supported by Fundamental Research Grant Scheme Ministry of Higher Education Malaysia

(FRGS/1/2017/SKK01/UNISZA/01/1-RR-235).

REFERENCES

1. Felce, D., & Perry, J. (1995). Quality of life: Its definition and measurement. *Research in Developmental Disabilities*, 16(1), 51-74.
2. Tarca, E., Simsek, T. T., & Akdag, I. (2021). The effect of dialysis on emotional well-being. *Journal of Clinical Nursing*, 30(3-4), 540-549.
3. Cruz, M. C., Andrade, C., & Urrutia, M. (2016). Quality of life in patients with chronic kidney disease. *Clinical Nursing Studies*, 4(4), 78-85.
4. Elhag, S., Rivas, N., Tejavath, S., Mustaffa, N., Deonarine, N., Abdullah Hashmi, M., & Hamid, P. (2022). Chronic kidney disease-associated pruritus: A glance at novel and lesser-known treatments. *Cureus*, 14(1), 1–11. <https://doi.org/10.7759/cureus.21127>
5. Elkinton J. R. (1966). Medicine and the quality of life. *Annals of internal medicine*, 64(3), 711–714. <https://doi.org/10.7326/0003-4819-64-3-711>
6. Musa, R., Ramli, A., Omar, M., & Rahman, R. A. (2018). Quality of life of patients undergoing haemodialysis at Hospital Tengku Ampuan Afzan and Hospital Sultan Haji Ahmad Shah. *Journal of Nursing and Health Sciences*, 7(2), 33-41.

7. Kim, J., & Park, K. (2019). Factors influencing quality of life among patients with chronic kidney disease in South Korea. *Journal of Renal Care*, 45(3), 152-159.
8. Kirsten, L., Segall, L., Naidoo, P., & Moodley, I. (2015). The lived experiences of patients on chronic haemodialysis in KwaZulu-Natal, South Africa. *Health SA Gesondheid*, 20(1), 69-77.
9. Silva, S. M., Resck, Z. M., & Silva, A. E. (2016). Social support in the context of patients on dialysis: A scoping review. *Revista Gaúcha de Enfermagem*, 37(2), e58652.
10. Green, J., Griva, K., Thompson, D., & Newman, S. P. (2011). Psychosocial and demographic predictors of quality of life in patients with end-stage renal disease. *Journal of Psychosomatic Research*, 71(6), 371-378.
11. Wright, L. K., Wilson, L. D., Novak, M., & Nissenson, A. R. (2011). Relationships between income sources, health insurance, and financial burden among end-stage renal disease patients. *American Journal of Kidney Diseases*, 58(6), 1005-1013.
12. Kalander, B., Rasmussen, B. S., Laursen, B. S., & Rydahl-Hansen, S. (2007). Health-related quality of life and self-reported symptoms in patients with moderate to advanced chronic kidney disease: A cross-sectional study. *Scandinavian Journal of Urology and Nephrology*, 41(1), 16-23.
13. Bullinger, M., & Quitmann, J. (2014). Quality of life as patient-reported outcomes: Principles of assessment. *Dialogues in Clinical Neuroscience*, 16(2), 137-145. <https://doi.org/10.31887/DCNS.2014.16.2/mbullinger>
14. Sukul, N., Karaboyas, A., Csomor, P. A., et al. (2021). Self-reported pruritus and clinical, dialysis-related, and patient-reported outcomes in hemodialysis patients. *Kidney Medicine*, 3(1), 42–53. <https://doi.org/10.1016/j.xkme.2020.08.011>
15. 2018 USRDS Annual Data Report [Internet]. *American Journal of Kidney Diseases*. (2019) 73(3): 9–22. [DOI: <https://doi.org/10.1053/j.ajkd.2019.01.002>]
16. Walklin, C.G., Young, H.M., Asghari, E. et al. (2023). The effect of a novel, digital physical activity and emotional well-being intervention on health-related quality of life in people with chronic kidney disease: trial design and baseline data from a multicentre prospective, wait-list randomised controlled trial (kidney BEAM). *BMC Nephrol* 24, 122. <https://doi.org/10.1186/s12882-023-03173-7>
17. Whitty C.J.M., MacEwen C., Goddard A. et. al. (2020). Rising to the challenge of multimorbidity. *The BMJ*; 368: British Medical Journal Publishing Group